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Exhibit A

#### **CURRICULUM VITAE**

#### Donald P. Braun, Ph.D.

## January, 2000

BUSINESS ADDRESS: Medical College of Ohio Cancer Institute

Medical College of Ohio 3120 Glendale Avenue Toledo, Ohio, 43614 Phone: 419-383-6632 Fax: 419-383-6714 e-mail: dbraun@mco.edu

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Perrysburg, Ohio, 43551

PERSONAL: Born: New York, NY; March 7, 1950

SS # 355-44-2224 Married: Judy Braun

Children: Jennifer, Matthew, Bethany

#### **EDUCATION AND TRAINING:**

1972 University of Illinois, Urbana, IL, B.S. degree.

1974 University of Illinois at the Medical Center, Chicago, IL, M.S. degree.
1976 University of Illinois at the Medical Center, Chicago, IL, Ph.D. degree.

#### CHRONOLOGY OF EMPLOYMENT:

1976-1977 Research Associate, Department of Microbiology, University of Illinois at the Medical Center, Chicago, IL.

1977-1978 Instructor, Department of Microbiology, University of Illinois at the Medical Center, Chicago, IL

1978-1979 Research Associate, Section of Medical Oncology, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL.

1979-1980 Instructor, Department of Medicine; Assistant Professor, Department of Immunology/Microbiology, Rush Medical College, Chicago, IL.

1981-1983 Assistant Professor, Department of Medicine; Assistant Professor, Department of Immunology/ Microbiology, Rush Medical College, Chicago, IL.

1983-1987 Associate Professor, Department of Medicine; Assistant Professor, Department of

Immunology/Microbiology, Rush Medical College, Chicago, IL.

1987 Associate Professor, Department of Medicine; Associate Professor, Department

of Immunology/Microbiology, Rush Medical College, Chicago, IL.

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1989	Associate Director, Section of Medical Oncology (for Research); Associate Professor, Department of Medicine; Associate Professor, Department of
1000 1000	Immunology/Microbiology, Rush Medical College, Chicago, IL.
1993-1999	Director, Scientific Program Development. Rush Cancer Institute.
1993-1999	Professor of Medicine and Immunology/Microbiology.
1999-present	of the state of th
1999-present	Professor, Department of Surgery, Medical College of Ohio.
FEDERAL GOVERNMENT/PUBLIC ADVISORY COMMITTEES:	
1982-1984	Member, Experimental Therapeutics Study Section, National Cancer Institute.
1983,1985	Member, Small Business Innovation Grant Review Study Section, NCI.
1985-1988	Member, Experimental Therapeutics I Study Section, NCI.
1985	Chairman, Experimental Therapeutics Special Study Section, NCI.
1985-1992	Biological Response Modifier Committee, Illinois Cancer Council
1986-present	Reviewing Member, Arizona Disease Control Research Commission.
1988-1989	Member, Chicago Leukemia Research Society.
1988-1989	Member, Small Business Innovation Grant Review Study Section, NCI.
1990, 1993	Ad Hoc reviewer, Experimental Therapeutics Study Section 1, NCI.
1991, 1992	Ad Hoc reviewer, Immunology and Immunotherapy Study Section, American
	Cancer Society-National Division.
1994-1998	Member, Immunology and Immunotherapy Study Section, American Cancer Society-National Division.
1999-present	
_	Cancer Institute/CTEP.
1999-present	Advisory Member, Ohio Cancer Incidence Surveillance System
2000	American Cancer Society Immunology and Immunotherapy Study Section, National
	Division-ad hoc review.

## **CONSULTANT POSITIONS:**

Burrough's Wellcome, 1983-1984 Pfizer Pharmaceutical, 1986-1988 Boehringer Mannheim, 1991-1993 Abbott Laboratories, 1993

Institute for the Study and Treatment of Endometriosis, 1990-present

Adeza Biomedical, 1993

Imutec Corporation, 1993-present

Imutec Corporation; Chairman, Medical Advisory Board, July, 1995-present. RxKinetic Inc.; Chairman, Medical Scientific Advisory Board. 1997-present.

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## COMPETITIVE EXTRAMURAL GRANT AWARDS: (note: as Principal Investigator or co-Principal Investigator only)

- "Cancer Drug Effects on Patient Suppressor Cells". Source: NIH/NCI # CA27598 Period of Support: 09/01/80-03/31/87; as co-Principal Investigator.
- 2. "Immune Testing in Lung CA During Specific Immunotherapy". Source: NIH/NCI # CA26138. Period of Support: 07/01/80-06/30/83; as co-Principal Investigator.
- 3. "A Phase I Clinical Trial of Natural and Recombinant Interleukin-2 (IL-2). Source: NIH/NCI # RFA No-1-CM47667-BRM-MA01. Period of Support: 09/30/84-03/31/87. Subcontract from the Illinois Cancer Council; as Laboratory Principal Investigator for Rush Component.
- "Phase IB and/or Phase II Clinical Trial of Natural and Recombinant Interleukin-2 (IL-2). Source: NIH/NCI # RFA No-1 CM47667-03 BRM-MA-04. Period of Support: 09/29/85-02/28/89. Laboratory Principal Investigator for Rush Component.
- 5. "Arachidonate Metabolism in Cancer Patient Macrophages". Source: NIH/NCI # CA41741.Period of Support: 07/01/88-06/30/92; as Principal Investigator.
- 6. "LAK Function in Tumor-Infiltrating Leukocytes of Cancer Patients". Source: American Society of Clinical Oncology- 1990 Young Investigator Award to E. Staren, M.D.; as Mentor.
- 7. "Cancer Patient Macrophage Function in Tumor Environments". Source: NIH/NCI #CA58922. Period of Support: 12/31/92-07/01/96 as Principal Investigator.
- 8. "American Cancer Society New Investigator Grants in Cancer Research". Source: American Cancer Society. Period of Support: 06/31/95-07/01/97 as Principal Investigator.
- 9. "Cancer Drug Modulation of Tumor Sensitivity to Macrophages". Source: NIH/NCI, period of support: 12/01/00-11/30/05, as Principal Investigator. status-pending.
- 10. "Cyclooxygenase Metabolism in Cancer Patient Psychoneuroimmunology". Source: American Cancer Society. Period of Support: 01/01/01-12/31/06, as Principal Investigator. Status-pending.

# NONCOMPETITIVE EXTRAMURAL FUNDING: (as principal or co-principal investigator)

1.. "The Effect of CGS13080, CGS14854 and CGS53913 on Arachidonic Acid Metabolites and Immune Status of Patients with Solid Tumors". Source: Ciba-Geigy. Period of Support: 10/01/87-09/30/88; as Principal Investigator.

- 2. "Phase III Protocol for Evaluation of Combined Modalities in the Treatment of Colonic Carcinoma with Positive Nodes, Duke's C, Surgical Resection Alone vs. Postoperative Immunotherapy followed by Chemotherapy". Source: Litton Institutes. Period of Support:06/30/88-present; as Laboratory Principal Investigator for Rush.
- 3. "Immunologic Testing and Limited Feldene Administration to Patients with Upper Aerodigestive Tract Squamous Cancer". Source: Pfiser Laboratories, Pfiser Inc. Period of Support: 10/01/89-06/30/91; as Principal Investigator.
- 4. "Macrophage Function in Women with Endometriosis". Source: Sterling International. Period of Support: 04/01/90-10/01/91; as Principal Investigator for Rush component.
- 5. "Macrophage Regulation of Endometrial Cell Growth in Women with Endometriosis". Source: Sterling International. Period of Support: 03/01/92-10/01/93; as Principal Investigator for Rush component.
- 6. "Mechanisms for Modulation of Macrophage Tumoricidal Function in Cancer Patients by Virulizin". Source: Imutec Corporation. Period of Support: 02/01/94-12/01/95; as Principal Investigator.
- 7. "Immunological Modulation in Pancreatic Cancer Patients treated with Virulizin". Source: Imutec International. Period of Support: 06/30/96-12/31/98; as Principal Investigator.
- 8. "Modulation of Macrophage Cytolytic Function by Virulizin in Endometriosis". Source: Imutec International. Period of Support: 06/30/96-12/31/97; as Principal Investigator.
- 9. "Interaction of HIP/PCA particles with leukocytes from Cancer Patients". Source: RxKinetix. Period of Support: 01/01/98 08/31/2001; as Principal Investigator.
- 10. "Endothelin Regulation of Tumor Proliferation and Apoptosis in Human Intracranial Malignancy". Source: Abott Laboratories. Period of Support (pending-to begin in 2000); as Principal Investigator.
- 11. "Amelioration of TNFα effects in endometriosis by Enbrel". Source: Immunex Corp. Period of support: 01/01/00-06/30/01. As Laboratory Principal Investigator.
- 11. "H11 binding to human cancer cells". Source: Novopharm Biotechnology. Period of Support: 05/01/00-09/01/01. As Principal Investigator.

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#### **HONORS:**

USPHS Immunology Trainee, 1973-1974.

USPHA Oncology Trainee, 1974-1976.

Milan V. Novak Award, University of Illinois, Department of Microbiology, 1977.

Who's Who in Cancer Research, 1985

American Men and Women in Science, 1988

1st place award for original research, American Fertility Society, 1992.

Chairman, Poster-Discussion Session, AACR, 1994.

Chairman, Immunology Plenary Session, Vth International Conf. on Endometriosis, 1996.

Chairman, Rationale for Immunotherapy in Endometriosis: VI World Congress on Endometriosis, Quebec City, Canada, 1998.

#### **ACTIVE MEMBERSHIPS:**

American Association for Cancer Research
American Chemical Society
American Association for the Advancement of Science
New York Academy of Science
Society of Biology Response Modifiers
American Fertility Society
American Society of Reproductive Medicine

#### **PUBLICATIONS:**

#### **BOOKS EDITED:**

1. Prostaglandin Inhibitors in Cancer Immunology and Immunotherapy. eds. JE Harris, DP Braun and KM Anderson. CRC Press, Boca Raton, FLA, 1994.

## **REVIEWS AND BOOK CHAPTERS:**

- 1. Dray S, and <u>Braun DP</u>: Some perspectives on the transfer of cell mediated immunity by immune RNA. Mol Cell Biochem 25:15, 1979.
- 2. <u>Braun DP</u>, and Harris JE: Serial immune function testing to predict clinical disease relapse in patients with solid tumors. Cancer Immunol Immunother 15:165, 1983.
- 3. Harris JE, and <u>Braun DP</u>: The effect of cytotoxic drugs on immunoregulatory cell function in solid tumor cancer patients. Clin Immunol Newsletter 5:113-116, 1984.

- 4. <u>Braun DP</u>, and Harris JE: Effects of cytotoxic chemotherapy on immune function in cancer patients. <u>In</u>: Proceedings of the 3rd International Symposium of the Evaluation of the Immunomodifiers, 1984.
- 5. <u>Braun DP</u>, and Harris JE: Modulation of the immune response by chemotherapy. <u>In</u>: The Modulation of Immunity. Mitchell MS (ed), Oxford: Pergamon Press, 1985.
- 6. Braun DP, and Harris JE: Effects of cytotoxic chemotherapy on immune function in cancer patients. Cancer Treat Symp 1:19-26, 1985.
- 7. <u>Braun DP</u>, and Harris JE: Cancer chemotherapy and its impact on the immune system. <u>In</u>: Fundamentals of Cancer Chemotherapy. Carter SK, and Hellman K (eds), New York: McGraw-Hill, pp 77-97, 1986.
- 8. Von Roenn J, Harris JE, and <u>Braun DP</u>: Suppressor cell function in solid tumor cancer patients. J Clin Oncol 5:150-159, 1987.
- 9. Dmowski WP, <u>Braun DP</u> and Gebel H: Endometriosis: Genetic and Immunologic Aspects. in: Current Concepts in Endometriosis. 2nd International Symposium on Endometriosis. Alan R. Liss, Inc. New York, p 99-122, 1989.
- 10. Dmowski WP, <u>Braun DP</u> and Gebel H: The Immune System in Endometriosis. in Modern Approaches to Endometriosis. J. Rock ed. Kluwer Academic Publishers, p 97-111, 1991.
- 11. Braun DP and Groenwald SL: The Immune System and Cancer. in Cancer Nursing: Principles and Practice. third edition. Groenwald SL and Goodman M eds. Jones and Bartlett, Boston, MA, pp 70-85, 1993.
- 12. Harris, J.E. and <u>Braun, D.P.</u>: Tumor Vaccination. in Cancer: Concept to Clinic. Medical Publishing Enterprises. Fair Lawn, NJ; E. Borden, ed. pp. 28-31, 1993.
- Braun DP: The Impact of Prostaglandins on Cancer Patient Immunity. in Prostaglandin Inhibitors in Tumor Immunology and Immunotherapy. Harris JE, Braun DP and Anderson KM, eds. CRC Press, Boca Raton, Florida, pp. 109-129, 1994.
- Dmowski WP, Gebel HM and <u>Braun DP</u>. The Role of Cell-Mediated Immunity in Pathogenesis of Endometriosis. Acta Obstet. Gynecol. Scand. Suppl. 73:7-14, 1994.
- 15. Dmowski WP and <u>Braun DP</u>. Immunological Aspects of Endometriosis. Contemp. Rev. Obstet. Gynaecol. 7: 167-171, 1995.

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- 16. Dmowski WP, <u>Braun DP</u>, and Rotman, C. Aspectos Immunologicos de la endometriosis. in Reproducion Humana. Remonhi, J, Simon C, Pellicer, A and Bonilla-Musoles, eds. McGraw Hill InterAmericana, Madrid, pp 195-204, 1996.
- 17. <u>Braun DP</u> and Dmowski WP. Endometriosis: Abnormal Endometrium and Dysfunctional Immune Response. Current Opinion in Obsterics and Gynecology. 10:365-369, 1998.
- 18. Dmowski WP, Gebel H, and <u>Braun DP</u>. Decreased Apoptosis and sensitivity to macrophage-mediated cytolosis of endometrial cells in endometriosis. Human Reproduction. In Press, 1999.

#### ARTICLES:

- 1. <u>Braun DP</u>, and Dray S: Immune RNA mediated transfer of tumor antigen responsiveness to unresponsive peritoneal exudate cells from tumor bearing animals. Cancer Res 37:4138-4144, 1977.
- 2. Mortensen RF, <u>Braun DP</u>, and Gewurz H: Effects of C-reactive protein on lymphocyte function. III. Inhibition of antigen-induced lymphocyte stimulation and lymphokine production. Cell Immunol 28:59-68, 1977.
- 3. <u>Braun DP</u>, Hengst J, Moykr M, and Dray S: Antitumor immunity in strain 2 guinea pigs immunized with KCl extracts of L<sub>2</sub>C tumor cells. J Natl Cancer Inst 60:899-903, 1978.
- 4. Mokyr M, <u>Braun DP</u>, Usher D, Reiter H, and Dray S: The development of *in vitro* and *in vivo* antitumor cytotoxicity in noncytotoxic, MOPC-315, tumor cells. Cancer Immunol Immunother 4:143-150, 1978.
- 5. <u>Braun DP</u>, Mokyr M, and Dray S: Generation of anti-MOPC-315 cytotoxicity in uneducated or *in vitro* educated spleen cells from normal or MOPC-315 tumor bearing mice pretreated *in vivo* with BCG. Cancer Res 38:1626-1631, 1978.
- 6. Mokyr M, <u>Braun DP</u>, and Dray S: Augmentation of antitumor cytotoxicity in spleen cells of MOPC-315 tumor bearers. <u>In</u>: Cancer Immunology: Experimental and Clinical. Crispin RG (ed), p 211, 1978.
- 7. Mokyr M, <u>Braun DP</u>, and Dray S: Augmentation of antitumor cytotoxicity in MOPC-315 tumor bearer spleen cells by depletion of glass adherent cells prior to *in vitro* education. Cancer Res 39:785, 1979.
- 8. Mokyr M, Bennett JA, <u>Braun DP</u>, Hengst JCD, Mitchell MS, and Dray S: Opposite effects of different strains or batches of the same strain of BCG on the *in vitro*

- generation of syngeneic and allogeneic antitumor cytotoxicity. J Natl Cancer Inst 64:339, 1980.
- 9. Cobleigh MA, <u>Braun DP</u>, and Harris JE: Age dependent changes in human peripheral blood B cell and T cell subsets: Correlation with mitogen responsiveness. Clin Immunol Immunopathol 15:162, 1980.
- 10. <u>Braun DP</u>, Cobleigh MA, and Harris JE: Selective effect of cytotoxic chemotherapy on immunoregulatory suppressor cells in solid tumor cancer patients. <u>In</u>: Tumor Progression. Crispen RG (ed), Philadelphia: Franklin Institute Press, pp 91-102, 1980.
- 11. Braun DP, Cobleigh MA, and Harris JE: Multiple concurrent immunoregulatory defects in cancer patients whose peripheral blood leukocytes exhibit depressed PHA induced lympho blastogenesis. Clin Immunol Immunopathol 17:89, 1980.
- 12. Cobleigh MA, Braun DP, and Harris JE: Quantitation of lymphocytes and T cell subsets (To and Tm cells) in disseminated solid tumor cancer patients. J Natl Cancer Inst 64:1041, 1980.
- 13. Paque RE, <u>Braun DP</u>, and Dray S: Characterization of lymphoid cell RNA which modulates specific cellular immunity. <u>In</u>: Second International Symposium on RNA in Development. Academia Sinics, 1980.
- 14. <u>Braun DP</u>, and Harris JE: Modulation of immune response by chemotherapy. Pharmacol Ther 14:89-122, 1981.
- 15. <u>Braun DP</u>, and Harris JE: Effects of combination chemotherapy on immunoregulatory cells in the peripheral blood of solid tumor cancer patients: Correlation with rebound-overshoot immune function recovery. Clin Immunol Immunopathol 20:143, 1981.
- 16. Braun DP, and Harris JE: Relationship of leukocyte numbers, immunoregulatory cell function and phytohemagglutinin responsiveness in cancer patients. J Natl Cancer Inst 67:809, 1981.
- 17. <u>Braun DP</u>, Harris JE, Maximovich S, Marder R, and Lint TF: Chemiluminescence in peripheral blood mononuclear cells of solid tumor cancer patients. Cancer Immunol Immunother 12:31, 1981.
- 18. <u>Braun DP</u>, Penn RD, Flannery AM, and Harris JE: Immunoregulatory cell function in peripheral blood of glioblastoma multiforme patients. Neurosurg 12:31, 1981.

- 19. DeBoer KP, <u>Braun DP</u>, and Harris JE: Natural cytotoxicity and antibody dependent cytotoxicity in solid tumor cancer patients: Regulation by adherent cells. Clin Immunol Immunopathol 23:133, 1982.
- 20. Harris JE, DeBoer KP, Vahey AL, and <u>Braun DP</u>: The measurement of leukocyte subsets in the peripheral blood of solid tumor cancer patients using monoclonal antibody reagents. Med Pediatr Oncol 10:185, 1982.
- 21. Taylor SG IV, Saffold P, <u>Braun DP</u>, and Harris JE: T<sub>G</sub> cell involvement in the leukocyte adherence inhibition phenomenon. J Natl Cancer Inst 68:549, 1982.
- 22. Braun DP, DeBoer KP, and Harris JE: Chemiluminescence, suppression and cytotoxicity in peripheral blood mononuclear cells from solid tumor cancer patients. Cancer Immunol Immunother 14:86, 1982.
- 23. Harris JE, Harris ZL, and <u>Braun DP</u>: Effect of interferon-α on indomethacin sensitive immunoregulatory cells. <u>In</u>: Proceedings of the 15th International Leukocyte Culture Conference. Parker JW, and O'Brien R (eds), Chichester, England: John Wiley and Sons, Ltd., p 635, 1983.
- 24. Chiu K, Harris JE, Kroin J, Slayton R, and <u>Braun DP</u>: The immunological response of Wistar rats to intracranially implanted C-6 glioma cell line. J Neurooncol 1:365-372, 1983.
- 25. Penn RD, Kroin JS, Harris JE, Chiu K, and <u>Braun DP</u>: Chronic intratumoral chemotherapy of a rat brain tumor with cisplatin and flourouracil. Appl Neurophysiol 46:240-244, 1983.
- 26. Braun DP, Nisius S, Hollinshead AC, and Harris JE: Serial immune testing in surgically resected lung cancer patients. Cancer Immunol Immunother 15:114-121, 1983.
- 27. Braun DP, Harris ZL, Harris JE, Sandler S, Khandekar J, Locker G, Haid M, Gordon L, Shaw J, Cobleigh MA, and Gallagher P: The effect of interferon therapy on indomethacin sensitive immunoregulation in the peripheral blood mononuclear cells of renal cell carcinoma patients. J Biol Response Mod 2(3):251-262, 1983.
- 28. Van Epps SF, Stewart LD, Pandey JP, Fudenberg HH, Harris JE, and Braun DP: Immuno-globulin G heavy chain (Gm) allotypes in lung cancer. N Engl J Med 1983.
- 29. Braun DP, Harris JE, and Rubenstein M: Relationship of arachidonic acid metabolism to indomethacin sensitive immunoregulatory function and lymphocyte PGE sensitivity

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in peripheral blood mononuclear cells of disseminated solid tumor cancer patients. J Immunopharmacol 6(3):227-236, 1984.

- 30. <u>Braun DP</u>, Penn RD, and Harris JE: Regulation of natural killer function by glass adherent cells in patients with primary intracranial malignancies. Neurosurg 15(1):29-33, 1984.
- 31. Braun DP, and Harris JE: Effects of combination chemotherapy on PGE mediated immunoregulation in the peripheral blood mononuclear cells of solid tumor cancer patients. J Biol Response Mod 3:391-396, 1984.
- 32. Braun DP, and Harris JE: Abnormal indomethacin sensitive suppression in peripheral blood mononuclear cells of cancer patients restricts augmentation by interleukin 2. J Biol Response Mod 3:533-540, 1984.
- 33. Chiu KM, McPherson LH, Harris JE, and <u>Braun DP</u>: The separation of cytotoxic human peripheral blood monocytes into high and low phagocytic subsets by centrifugal elutriation. J Leukocyte Biol 36:729-737, 1984.
- 34. Braun DP, and Harris JE: Effect of cytotoxic antineoplastic chemotherapy on immunoregulatory leukocytes measured with monoclonal antibodies. Clin Immuno Immunopathol 33(1);54-56, 1984.
- 35. Leslie WT, Templeton A, and <u>Braun DP</u>: Kaposi's sarcoma in the acquired immune deficiency syndrome. Med Pediatr Oncol 12:336-342, 1984.
- 36. <u>Braun DP</u>, and Harris JE: Effect of chemotherapy on NK function in the peripheral blood of cancer patients. Cancer Immunol Immunother 21:240-245, 1986.
- 37. <u>Braun DP</u>, and Harris JE: Abnormal monocyte function in patients with Kaposi's sarcoma. Cancer 57:1501-1506, 1986.
- 38. Janus TJ, <u>Braun DP</u>, and Harris JE: Modulation of lymphocyte responsiveness to phyto-hemagglutinin by micromolecular fibrinogen degradation products. Clin Immunol Immuno-pathol 41:26-34, 1986.
- 39. Potempa LA, Gewurz H, Harris JE, and <u>Braun DP</u>: Stimulatory effects of the C-reactive protein subunit on monocyte function, including release of IL 1. Protides Biol Fluids 34:287-290, 1986.
- 40. <u>Braun DP</u>, Bonomi PD, Taylor SG IV, and Harris JE: Modification of the effects of cytotoxic chemotherapy on the immune responses of cancer patients with a nonsteroidal anti-inflammatory drug, piroxicam. J Biol Response Mod 6:331-345, 1987.

- 41. Harris JE, and <u>Braun DP</u>: Modulation of immune function in cancer patients. Clin Physiol Biochem 5:222-226, 1987.
- 42. Wiederhold MD, Ondrey F, Anderson KM, <u>Braun DP</u>, and Harris JE: Synthesis of eicosanoids by γ-interferon differentiated U937 cells. Clin Physiol Biochem 6:21-28, 1988.
- 43. McMannis JD, Fisher RI, Creekmore SP, <u>Braun DP</u>, Harris JE, and Ellis TM: *In vivo* effects of recombinant IL 1. I. Isolation of circulating Leu 19<sup>+</sup> lymphokine activated killer effector cells from cancer patients receiving recombinant IL 2. J Immunol 140:1335-1340, 1988.
- 44. Harris JE, and <u>Braun DP</u>: Modulation of *in vitro* antitumor immunity in response to the biological activators of IL 1, γ-interferon, and GM-CSF in the peripheral blood of cancer patients receiving cytotoxic chemotherapy. Ann NY Acad Med 65:16-25, 1988.
- 45. Braun DP, Kessler H, Falk L, Paul D, Harris JE, Blaauw B, and Landay AL: Monocyte functional studies in asymptomatic HIV-infected individuals. J Clin Immunol 8:486-494, 1988.
- 46. Staren ED, <u>Braun DP</u>, Harris JE, Bines SD, and Economou SG: Lymphokine activated killer cell induction in the peripheral blood mononuclear cells of colon cancer patients. Surg Forum 39:447-449, 1988.
- 47. Ellis TM, Creekmore S, McMannis J, <u>Braun DP</u>, Harris JE, and Fisher RI: Appearance and phenotypic characterization of circulating Leu 19<sup>+</sup> cells in cancer patients receiving recombinant interleukin 2. Cancer Res 48:6597-6602, 1988.
- 48. Braun DP, Taylor ST IV, and Harris JE: Modulation of immunity in cancer patients by prostaglandin antagonists. Prog Clin Biol Res 288:444-448, 1989.
- 49. Creekmore SP, Harris JE, Ellis TM, <u>Braun DP</u>, Cohen II, Bhoopalam N, Jassak PF, Cahill MA, Canzoneri CL, and Fisher RI: A phase I clinical trial of recombinant interleukin 2 by periodic 24 hour infusions. J Clin Oncol 7:276-284, 1989.
- 50. Staren ED, Economou SG, Harris JE, and <u>Braun DP</u>: Lymphokine activated killer cell induction in tumor infiltrating leukocytes from colon cancer patients. Cancer 64:2238-2242, 1989.
- 51. <u>Braun DP</u>, Siziopikou KP, Casey LC, and Harris JE: The *in vitro* development of cytotoxicity in response to granulocyte/macrophage colony stimulating factor or γ-interferon in the peripheral blood monocytes of patients with solid tumors. Modulation

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by arachidonic acid metabolic inhibitors. Cancer Immunol Immunother. 32:55-61, 1990.

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- 52. Harris JE, and Braun DP: The effect of aspirin and other cyclooxygenase inhibitors on antitumor immunity. In: Aspirin towards 2000 (G. Fryers, editor). pp. 45-52. Royal Society of Medicine. 1990.
- 53. Siziopikou KP, Harris JE, Casey L, Nawans Y and <u>Braun DP</u>. Impaired Tumoricidal Function of Alveolar Macrophages from Patients with Non-small Cell Lung Cancer. Cancer, 68:1035-1044, 1991.
- 54. Braun, D.P., Gebel, H., Rana, N., Rotman, C., and Dmowski, W.P. Peritoneal Macrophage Function in Women with Endometriosis., Fertility and Sterility 57: 1203-1210, 1992.
- 55. Harris, J.E. and <u>Braun</u>, <u>D.P.</u>: Abnormal immunoregulation in human cancer at the actual tumor site. In "Combination Therapies. Biological Response Modifiers in the Treatment of Cancer and Infectious Diseases. A. Goldstein, ed. Plenum Publishing, New York, pp. 197-206, 1992.
- 56. Harris, J.E. and <u>Braun, D.P.</u>: Abnormal immunoregulation and the tumor dormant state in human cancer. In "Cellular Immune Mechanisms and Tumor Dormancy" (T. Stewart, editor). CRC Press, Boca Raton, FLA, pp. 261-280, 1992.
- 57. Chu, E., Casey, L.C., Harris, J.E. and <u>Braun, D.P.</u> Suppression of the Development of Tumoricidal Function in Gamma Interferon-treated Human Peripheral Blood Monocytes by Lipopolysaccharide: The role of Cyclooxygenase Metabolites. J. of Clin. Immunol. 13: 49-57, 1993.
- 58. <u>Braun, DP</u>, Ahn, M, Chu, E, Casey, L.C., Harris, JE, Wilbanks, G, and Siziopikou, KP. The sensitivity of macrophages from Different Anatomical Sites of Cancer Patients to Arachidonic Acid Metabolism. Cancer Research 53: 3362-3368, 1993.
- 59. Braun, DP, Muriana M, Gebel H, Rotman C, Rana N and Dmowski WP. Monocyte-mediated enhancement of endometrial cell proliferation in women with endometriosis. Fertility and Sterility 61: 78-85, 1994.
- 60. Braun, DP, Gebel H and Dmowski WP. Effect of danazol in vitro and in vivo on monocyte-mediated enhancement of endometrial cell proliferation in women with endometriosis. Fertility and Sterility 62: 89-95, 1994.

- 61. Gebel HM, <u>Braun DP</u>, Rotman C, Rana N and Dmowski WP. Decreased in vitro production of IgG in women with severe endometriosis. Amer. J. Reprod. Immunol. 29: 124-130, 1993.
- 62. Dmowski WP, Gebel HM and <u>Braun DP</u>. The role of cell-mediated immunity in pathogenesis of endometriosis. Acta Obstet Gynecol Scand 159: 7-14, 1994.
- 63. Gebel HM, Rana N, <u>Braun DP</u>, and Dmowski WP. Differential Expression of VLAB1 (CD29) on monocytes from patients with endometriosis. Amer J Reprod Immunol 34: 317-322, 1995.
- 64. Rana N, <u>Braun DP</u>, Rotman C, Gebel HM and Dmowski WP. Cytokine Synthesis by peritoneal macrophages in patients with endometriosis. Fertility Sterility,65:925-931,1996.
- 65. Braun DP, House R, Gebel HG, Rana N, and Dmowski WP. Cytokine synthesis by peripheral blood monocytes of patients with endometriosis. Fertility and Sterility 65: 1125-1129, 1996.
- 66. Braun DP and Preisler HD. Cytolytic Activity of Peripheral Blood Blast Cells from Patients with Acute Myeloid Leukemia. Leukemia and Lymphoma 27: 459-467, 1997.
- 67. Siziopikou KP, Ahn M, Casey LC, Silver M, and <u>Braun DP</u>. Augmentation of impaired tumorical function in alveolar macrophages from lung cancer patients by coculture with allogeneic lymphocytes. Cancer Immunol. Immunother. 45:29-36, 1997.
- 68. Ahn M, Siziopikou KP, Casey LC, Harris JE and <u>Braun DP</u>. Suppression of tumoricidal function in alveolar macrophages from lung cancer patients by Interleukin-6. Cancer Immunol. Immunother. 45: 37-44, 1997.
- 69. Ono N, Glick R, Kroin J. Penn RD and <u>Braun DP</u>. Effect of IGF inhibitor on proliferation of rat C6 glioma and human glioma explants. Submitted to J. Neurosurgery.
- 70. Braun DP, Gebel HG, Rana N, and Dmowski WP. Cytolysis of eutopic and ectopic endometrial cells by peripheral blood monocytes and peritoneal macrophages in women with endometriosis. Fertility and Sterility 69: 1103-, 1998.
  - 71. Gebel HG, Braun DP, Frame D, Tambur A, Rana N and Dmowski WP. Spontaneous Apoptosis in eutopic and ectopic endometrium from women with endometriosis. Fertility and Sterility 69: 1042-1047, 1998.

Page 14

- 72. Wong PY, Staren ED, Tereshkova N, and <u>Braun DP</u>: Functional Analysis of Tumor-infiltrating leukocytes in breast cancer patients. J. Surg. Res. 76: 95-103, 1998
- 73. Wilbanks GD, Ahn M, Beck DA and Braun DP. Antitumor cytotoxicity of peripheral blood monocytes and peritoneal macrophages from patients with gynecological malignancies. Int. J. Gynecological Cancer 9: 427-432, 1999.
- 74. Ferdinandi E, Braun DP, Liu C, Zee B, and Ely G. Virulizin: A Review of its Antineoplastic Activity. Exp Opin. Invest. Drugs 8: 1721-1735, 1999.
- Ortegel JW, Staren ED, Faber LP, Warren WH and <u>Braun, DP.</u> Cytokine Biosynthesis by Tumor-Infiltrating T Lymphocytes from Human Non-Small Cell Lung Carcinoma. Cancer Immunology and Immunotherapy, 48:627, 2000.
- Ortegel JW, Staren ED, Faber LP, Warren WH and Braun, DP. Modulation of Autologous Tumor cytotoxicity by Tumor-infiltrating Lymphocytes from non-Small Cell Lung Carcinoma by Type 2 Cytokines and Transforming Growth Factor-β. Submitted to Journal of Cytokine Research, 2000.
- 77. Dmowski, WP, Ding, J, Shen, J, Rana, N, Fernandez, BB, Braun, DP. Apoptosis in Endometrial Glandular and Stromal Cells in Women With and Without Endometriosis. Submitted to Human Reproduction, July 2000.

## ABSTRACTS AND LETTERS:

- 1. <u>Braun DP</u>, and Dray S: Tumor immune RNA conversion of lymphoid cells of tumor-bearing mice from being unresponsive to responsive upon challenge with tumor specific antigen. Cancer Res 17:7, 1976.
- 2. <u>Braun DP</u>, and Dray S: The effect of BCG on the *in vitro* education of normal spleen cells and of tumor bearing spleen cells. Cancer Res 19:154, 1978.
- 3. Hengst JCD, and <u>Braun DP</u>: Opposite effects of different batches of BCG on the *in vitro* generation of antitumor cytotoxicity. Cancer Res 20:67, 1979.
- 4. <u>Braun DP</u>, Cobleigh MA, and Harris JE: Explanation for rebound-overshoot recovery of immune function in cancer patients receiving cytotoxic drugs. Clin Res 27:643A, 1979.
- 5. Cobleigh MA, <u>Braun DP</u>, and Harris JE: Lymphocyte subset variation in normal aging subjects and in cancer patients. Clin Res 27:643A, 1979.

- 6. Cobleigh MA, Braun DP, and Harris JE: Multiple concurrent suppressor cell mechanisms in human malignant disease. Blood 54(1):97A, 1979.
- 7. Braun DP, Cobleigh MA, and Harris JE: The rebound-overshoot phenomenon: A consequence of selective cytotoxic drug effect on immunoregulatory suppressor mechanisms. Proc Am Assoc Cancer Res 21:373, 1980.
- 8. <u>Braun DP</u>, Rossof AH, and Harris JE: Relationship of monocyte percentage and monocyte suppressor activity to T lymphocyte function in solid tumor cancer patients. Proc Am Assoc Cancer Res 21:370, 1981.
- 9. Harris JE, and <u>Braun DP</u>: Effects of adjuvant chemotherapy for stage II breast cancer on immunoregulatory cell function. Proc Am Assoc Cancer Res 21:370, 1981.
- Harris JE, and <u>Braun DP</u>: Effects of combination chemotherapy on immunoregulatory cell functions in solid tumor cancer patients: Correlation with rebound-overshoot recovery of immunity. Proc Am Assoc Cancer Res 21:183, 1981.
- 11. Braun DP, and Harris JE: Monocyte suppression and activation in solid tumor cancer patients. Proc Am Assoc Cancer Res 21:185, 1981.
- 12. Chiu KM, Braun DP, and Harris JE: Suppression of alloimmune response in normal individuals and cancer patients by indomethacin sensitive cells. Clin Res 29:735A, 1981.
- 13. DeBoer KP, <u>Braun DP</u>, and Harris JE: Adherent cell suppression of natural cytotoxicity in solid tumor patients. Clin Res 29:735A, 1981.
- 14. Rubenstein M, <u>Braun DP</u>, and Harris JE: Abnormal prostaglandin metabolism in cancer patient monocytes. Clin Res 29:737A, 1981.
- 15. <u>Braun DP</u>, DeBoer KP, and Harris JE: Relationship of monocyte prostaglandin metabolism and monocyte indomethacin sensitive immunoregulatory function in peripheral blood mononuclear cells of disseminated solid tumor cancer patients. Blood 58:70a, 1981.
- 16. Harris JE, <u>Braun DP</u>, DeBoer KP, and Vahey AL: Enumeration with monoclonal antibodies of leukocyte subsets in peripheral blood of solid tumor cancer patients. Blood 58:83a, 1981.
- 17. Harris JE, Vahey AL, and <u>Braun DP</u>: Quantitation with monoclonal antibodies of leukocyte subsets in peripheral blood mononuclear cells of solid tumor cancer patients. Proc Am Soc Clin Oncol 1:42, 1982.

- 18. Chiu KM, Droin J, Harris JE, and <u>Braun DP</u>: The immunological response of Wistar rats to the C-6 glioma cell line. Proc Am Assoc Cancer Res 23:241, 1982.
- 19. Harris JE, and <u>Braun DP</u>: Suppressor cell development predicts for tumor recurrence in surgically resected lung cancer. Proc Am Assoc Cancer Res 23:250, 1982.
- 20. Penn RD, Showel J, Harris JE, <u>Braun DP</u>, and Wolter J: Immunoregulatory cell studies in patients with gliomas. Proc Am Assoc Cancer Res 23:251, 1982.
- 21. Braun DP, and Harris JE: Relationship of arachidonic acid metabolism and indomethacin sensitive immunoregulatory function in peripheral blood mononuclear cells of disseminated solid tumor cancer patients. Proc Am Assoc Cancer Res 23:262, 1982.
- 22. Harris ZL, <u>Braun DP</u>, and Harris JE: Interferon therapy causes impaired lymphoproliferation by prostaglandin mediated mechanisms. Clin Res 30(1):747A, 1982.
- 23. Harris JE, and <u>Braun DP</u>: The effect of interferon therapy on immunoregulatory cells in the peripheral blood of patients with renal cell carcinoma. Immunobiol 163:255, 1982.
- 24. Braun DP, and Harris JE: Effect of chemotherapy on immunoregulation in solid tumor cancer patients: Correlation with changes in monocyte PGE synthesis and lymphocyte PGE sensitivity. Proc Am Assoc Cancer Res 24:215, 1983.
- 25. Harris JE, Harris ZL, and <u>Braun DP</u>: Depression of monocyte induced lymphoproliferative responses in peripheral blood mononuclear cells (PBMC) from renal cell carcinoma patients treated with human leukocyte interferon (IFN-α). Proc Am Assoc Cancer Res 24:205, 1983.
- 26. Chiu KM, McPherson LH, Harris JE, Slayton RE, and <u>Braun DP</u>: The separation of cytotoxic human peripheral blood monocytes into phagocytic and nonphagocytic subsets by centrifugal elutriation. Proc Am Assoc Cancer Res 24:215, 1983.
- 27. <u>Braun DP</u>, Harris JE, and Taylor SG IV: Effect of chemotherapy on monoclonal antibody defined leukocyte subsets in solid tumor cancer patients. Proc Am Soc Clin Oncol 2:56, 1983.
- 28. Penn RD, Braun DP, Harris JE, and Rossof AH: Modulation of natural killer cell function in brain tumor patients by glass adherent suppressor cells. Proc Am Soc Clin Oncol 3:57, 1984.

- 29. Braun DP, Harris JE, and Taylor SG III: Effect of chemotherapy on monoclonal antibody defined leukocyte subsets in solid tumor cancer patients. Proc Am Assoc Cancer Res 25:234, 1984.
- 30. Braun DP, and Harris JE: Chemotherapeutic modulation of NK function in peripheral blood mononuclear cells of cancer patients. Proc Am Assoc Cancer Res 25:234, 1983.
- 31. <u>Braun DP</u>, Wolter J, and Harris JE: NK function and immunoregulation in peripheral blood mononuclear cells (PBMC) from sarcoma patients treated with fibroblast interferon. Proc Am Soc Clin Oncol 3:56, 1984.
- 32. Janus T, Slayton WB, Harris JE, Rossof AH, and <u>Braun DP</u>: Modulation of lymphocyte responsiveness to phytohemagglutinin (PHA) by micromolecular fibrinogen degradation products (FDP) due to induction of monocyte suppressor cells. Proc Am Assoc Cancer Res 25:243, 1984.
- 33. Harris JE, Wiederhold MD, Slayton J, and <u>Braun DP</u>: Abnormal arachidonate conversion to prostaglandins, leukotrienes and eicosatetraenoic acids in cancer patient monocytes. Blood 64:190a, 1984.
- 34. Wiederhold MD, Harris JE, and <u>Braun DP</u>: Modulation of arachidonate incorporation into macrophage membrane phospholipids by interferon. Fed Proc 44:951, 1985.
- 35. Braun DP, Von Roenn J, and Harris JE: Modification of chemotherapy induced immunosuppression in lung cancer patients with piroxicam. Proc Am Soc Clin Oncol 4:223, 1985.
- 36. Taylor SG IV, Harris JE, and <u>Braun DP</u>: Potentiation of T cell immunity in head and neck cancer patients with nonsteroidal antiinflammatory agents. Proc Am Assoc Cancer Res 26:278, 1985.
- 37. Leslie WT, Harris JE, Slayton RE, Wiederhold MD, Slayton JM, and Braun DP: Modulation of arachidonic acid metabolism in monocytes by α- and γ-interferon. Proc Am Assoc Cancer Res 26:279, 1985.
- 38. Harris JE, and <u>Braun DP</u>: Abnormal monocyte function in patients with Kaposi's sarcoma. Proc Am Assoc Cancer Res 26:286, 1985.
- 39. Anderson KM, Harris JE, Saffold P, and <u>Braun DP</u>: Modulation of cyclic nucleotide responses in lymphocytes by prostaglandin and interleukin 2. Proc Am Assoc Cancer Res 26:303, 1985.

- 40. Wiederhold MD, Slayton JM, Harris JE, Anderson KM, and <u>Braun DP</u>: Stimulation of phospholipase activity in U937 cells following treatment with α- and γ-interferon. Proc Am Assoc Cancer Res 26:307, 1985.
- 41. Williams GS, Harris JE, and <u>Braun DP</u>: The role of arachidonic acid metabolism in spontaneous cytotoxicity and immunoregulation of subsets of human peripheral blood monocytes. Proc Am Assoc Cancer Res 26:307, 1985.
- 42. Braun DP, Harris JE, Slayton JM, and Wiederhold MD: Altered arachidonic acid metabolism in cancer patient monocytes. Proc Am Assoc Cancer Res 26:307, 1985.
- 43. Harris JE, Wiederhold MD, Slayton JM, and <u>Braun DP</u>: Arachidonate incorporation and release from the membrane phospholipids of cancer patient monocytes. J Leukocyte Biol 38:133, 1985.
- 44. Williams GS, Harris JE, and <u>Braun DP</u>: Differences in accessory cell function of subsets of human peripheral blood monocytes. J Leukocyte Biol 38:180, 1985.
- 45. Harris JE, Janus TJ, and <u>Braun DP</u>: Fibrinogen degradation products (FDP) induce normal monocytes to become suppressor cells by modifying arachidonic acid metablism. Blood 66:87a, 1985.
- 46. Ondrey F, Wiederhold MD, Anderson KM, <u>Braun DP</u>, and Harris JE: Early PMA-induced morphologic changes, release of arachidonic acid, and synthesis of eicosanoids in U937 cells. Proc Am Assoc Cancer Res 27:58, 1986.
- 47. Leslie WT, Taylor SG IV, Harris JE, and <u>Braun DP</u>: Immune studies in renal cell carcinoma (RCC) patients treated with interferon. Proc Am Assoc Cancer Res 27:321, 1986.
- 48. Harris JE, and <u>Braun DP</u>: Modification of chemotherapy induced immunosuppression by the nonsteroidal antiinflammatory drug (NSAID), piroxicam. Proc Am Assoc Cancer Res 27:328, 1986.
- 49. <u>Braun DP</u>, Roseman D, and Harris JE: Enhanced interleukin 1 (IL 1) synthesis by monocytes from colon cancer patients. Proc Am Assoc Cancer Res 27:345, 1986.
- 50. Ebie N, Harris JE, Anderson KM, Wolter J, and <u>Braun DP</u>: Cyclic nucleotide responses in peripheral blood mononuclear cells of cancer patients following stimulation with interleukin 2 (IL 2) or prostaglandin E (PGE). Proc Am Assoc Cancer Res 27:345, 1986.

- 51. Wiederhold MD, Anderson KM, Ondrey F, <u>Braun DP</u>, and Harris JE: Analysis of monocyte cellular phospholipid fatty acid composition in patients with renal cell carcinoma with and without lymphoblastoid interferon (Hu IFN Ly) therapy. Proc Am Assoc Cancer Res 27:349, 1986.
- Williams GS, Harris JE, Rossof AH, and <u>Braun DP</u>: Arachidonic acid (AA) metabolism differences in subsets of human peripheral blood monocytes separated by elutriation (CCE). Proc Am Assoc Cancer Res 27:350, 1986.
- 53. Harris JE, Landay AL, Falk L, Paul D, and <u>Braun DP</u>: Monocyte functional disturbances in asymptomatic homosexual males (AHM), AIDS-related complex syndrome (ARCS) patients, and aquired immune deficienty patients (AIDS). Blood 68:127a, 1986.
- Landay AL, Kessler H, <u>Braun DP</u>, Harris JE, Paul D, and Falk L: Isolation of human immunodeficiency virus (HIV) from peripheral blood monocytes of subjects at risk for AIDS. Blood 68:129a, 1986.
- Siebert P, Wiederhold MD, Anderson KM, Ondrey F, Harris JE, and <u>Braun DP</u>: Morphologic changes and alterations in eicosanoid metabolism induced in U937 cells by γ-interferon. Proc Am Assoc Cancer Res 28:339, #1341, 1987.
- 56. Conlon K, Harris JE, and <u>Braun DP</u>: Modulation of lymphokine activated killer (LAK) cell induction with eicosanoid synthesis inhibitors. Proc Am Assoc Cancer Res 28:367, #1455, 1987.
- 57. Chu EB, Potempa LA, Harris JE, Gewurz H, and Braun DP: Modulation of monocyte cytotoxicity with urea-chelated and acid-modified C-reactive protein (CRP). Proc Am Assoc Cancer Res 28:344, #1362, 1987.
- 58. Braun DP, Staren ED, and Harris JE: Lymphokine activated killer cell (LAK) induction in tumor infiltrating leukocytes (TIL) and peripheral blood mononuclear cells (PBMC) from colon cancer patients. Proc Am Assoc Cancer Res 28:371, #1472, 1987.
- Potempa LA, Gewurz H, Harris JE, and <u>Braun DP</u>: Modulation of monocyte function by modified antigenically distinct forms of C-reactive protein (CRP). Proc Am Assoc Cancer Res 28:344, #1363, 1987.
- 60. Harris JE, Taylor SG IV, and <u>Braun DP</u>: Modulation of lymphokine activated killer (LAK) cell induction following cytotoxic chemotherapy. Proc Am Assoc Cancer Res 28:372, #1475, 1987.

- 61. Creekmore SP, Harris JE, Ellis TM, Braun DP, McMannis JD, Cohen II, Bhoopalam N, Jassak PF, Cahill MA, Canzoneri CL, and Fisher RI: Phase I/II trial of recombinant interleukin 2 by 24 hour continuous infusion. An Illinois Cancer Council Trial. Proc Am Soc Clin Oncol 6:244, #960, 1987.
- 62. Harris JE, Landay AL, Kessler H, Falk L, Paul D, and <u>Braun DP</u>: Abnormal indomethacin sensitive suppressor cell (ISSC) function is associated with deficient lymphokine activated killer (LAK) cell induction in patients infected with the human immunodeficiency virus (HIV). Proc Am Soc Clin Oncol 6:3, #11, 1987.
- 63. Ellis T, <u>Braun DP</u>, Creekmore SP, Bhoopalam N, Harris JE, and Fisher RI: Appearance and phenotypic characterization of circulating Leu 19<sup>+</sup> cells in patients receiving recombinant IL 2. Proc Am Assoc Cancer Res 28:373, #1480, 1987.
- 64. McMannis JD, <u>Braun DP</u>, Fisher RI, Creekmore SP, Harris JE, and Ellis TM: Demonstration of circulating lymphokine activated killer (LAK) cells in patients receiving interleukin 2 (IL 2). Proc Am Assoc Cancer Res 28:372, #1474, 1987.
- 65. Landay AL, Harris JE, Falk L, Paul D, Kessler H, and <u>Braun DP</u>: Abnormal lymphokine activated killer cell (LAK) induction in peripheral blood mononuclear cells (PBMC) in patients infected with the human immunodeficiency virus (HIV). Proc 3rd International Conference on AIDS, 1987.
- 66. Levy RA, Harris JE, Bagdade JD, and Braun DP: Marine lipids suppress monocyte mediated cytotoxicity in women with insulin dependent diabetes mellitus. Clin Res 35(6):826A, 1987.
- 67. Braun DP, and Harris JE: Improved response to monocyte activators in the peripheral blood monocytes of patients with solid tumors following cytotoxic chemotherapy. Proc Am Assoc Cancer Res 29:373, #1484, 1988.
- 68. Chu EB, Potempa LA, Harris JE, Gewurz H, and <u>Braun DP</u>: Reversal of Neo-Creactive protein mediated suppression of monocyte cytotoxicity by modulation of arachidonate metabolism. Proc Am Assoc Cancer Res 29:371, #1477, 1988.
- 69. Staren ED, <u>Braun DP</u>, Harris JE, and Economou SG: Lymphokine activated killer cell induction in tumor infiltrating leukocytes and peripheral blood mononuclear cells from colon cancer patients. Proc Am Assoc Cancer Res 29:406, #1617, 1988.
- 70. Taylor SG IV, Harris JE, and <u>Braun DP</u>: Modulation of monocyte cytotoxicity by arachidonic acid metabolic inhibitors in the peripheral blood monocytes of patients with solid tumors. Proc Am Assoc Cancer Res 29:371, #1478, 1988.

- 71. Staren ED, Harris JE, and <u>Braun DP</u>: Lymphokine activated killer (LAK) cell induction in the peripheral blood mononuclear cells (PBMC) of colon cancer patients. Proc Am Soc Clin Oncol 7:98, #373, 1988.
- 72. <u>Braun DP</u>, Siziopikou KP, and Harris JE: Modulation of monocyte cytotoxicity in response to granulocyte/macrophage colony stimulating factor (GM-CSF) and γ-interferon (γ-IFN) by arachidonic acid metabolic inhibitors. Blood 72:142a, 1988.
- 73. Gaynor ER, Ellis TM, Harris JE, <u>Braun DP</u>, Tuteur D, Creekmore S, and Fisher RI: Adjuvant immunotherapy using intermittent 24 hour infusion of recombinant interleukin 2 (rIL 2) in patients with surgically resected colon carcinoma at high risk for recurrence. Proc Am Soc Clin Oncol 8:190, #739, 1989.
- 74. Braun DP, Harris JE, Landay AL, and Kessler H: Impaired development of monocyte tumor cytotoxicity in response to γ-interferon (γ-IFN) and granulocyte/macrophage colony stimulating factor (GM-CSF) in the peripheral blood monocytes of asymptomatic human immunodeficiency virus (HIV) infected patients. Potentiation of responsiveness by indomethacin. Proc Am Soc Clin Oncol 8:1, #4, 1989.
- 75. Staren ED, <u>Braun DP</u>, Harris JE, Bines SD, and Economou SG: Characterization of interleukin 2 (IL 2) activated killer cells in tumor infiltrating leukocytes (TIL) from colon cancer patients. Proc Am Soc Clin Oncol 8:103, #398, 1989.
- 76. Siziopikou KP, Casey LC, Harris JE, and <u>Braun DP</u>: Imparied development of tumoricidal function in the alveolar macrophages (AM) of patients with lung cancer. Proc Am Assoc Cancer Res 30:334, #1323, 1989.
- 77. Chu EB, Potempa LA, Gewurz H, Harris JE, and <u>Braun DP</u>: Modulation of the development of tumoricidal function in response to macrophage activators by a modified form of the C-reactive protein. Proc Am Assoc Cancer Res 30:333, #1322, 1989.
- 78. Braun DP, Siziopikou KP, and Harris JE: Modulation of the *in vitro* development of tumoricidal function in response to combinations of macrophage activators in the peripheral blood monocytes (PBM) of cancer patients (pts). Proc Am Assoc Cancer Res 30:334, #1324.
- 79. Taylor SG IV, Harlan S, McHale M, Rudolph A, Braun DP, and Harris JE: Phase I dose escalation of TNF/IL 2 combination therapy in human malignancies. Proc Am Assoc Cancer Res 30:405, #1609, 1989.

- 80. Staren ED, Economou SG, Harris JE, Bines S, and Braun DP: Tumor induced modulation of lymphokine activated killer cell induction in tumor infiltrating leukocytes. Proc Am Assoc Cancer Res 31:238, #1405, 1990.
- 81. Braun DP, Siziopikou KP, Casey L, and Harris JE: Augmentation of impaired tumoricidal function in alveolar macrophages from lung cancer patients by cocultivation with allogeneic lymphocytes. Proc Am Assoc Cancer Res 31:244, #1443, 1990.
- 82. Siziopikou KP, Casey L, Harris JE, and <u>Braun DP</u>: Tumor necrosis factor secretion, interleukin 1 secretion, and the development of cytotoxicity in alveolar macrophages from lung cancer patients. Proc Am Assoc Cancer Res 31:244, #1442, 1990.
- 83. Harris, JE, Siziopikou KP, Ahn M, Wilbanks GD, Jordan E and <u>Braun DP</u>: The induction of tumoricidal function in regional versus systemic macrophages from patients with solid tumors. Proc Am Assoc Clin Oncol, 10:214, 1991.
- 84. Chu EB, Gewurz H, Harris JE and <u>Braun DP</u>: Arachidonic acid metabolism in macrophages treated with a modified form of the C-reactive protein. Proc Am Assoc Cancer Res, 32:232, 1991.
- 85. Braun DP, Siziopikou KP, Ahn M and Harris JE: Induction of tumoricidal function in macrophages from cancer patients by anti-CD3 monoclonal antibodies. Proc Am Assoc Cancer Res, 32:232, 1991.
- 86. Harris JE, Siziopikou KP, Casey LM and <u>Braun DP</u>: Sensitivity of alveolar macrophages and peripheral blood monocytes to modulation of arachidonic acid metabolism. Proc Am Assoc Cancer Res, 32:233, 1991.
- 87. Harris JE, Ahn M and <u>Braun DP</u>: Differential sensitivity of peripheral blood monocytes (PBM), alveolar macrophages (AM) and peritoneal macrophages (PM) from cancer patients to modulation of arachidonic acid (AA) metabolism. Blood 78:1072, 1991.
- 88. Harris JE and Braun DP: Natural Killer (NK) cell function in renal cell cancer patients (RCC pts): Identification of a subset responsive to immunological manipulation. Proc. Am. Soc. Clin. Oncol. 11:257, 1992.
- 89. Braun DP, Ahn M, and Harris JE: Sensitivity of human macrophages from different anatomical sites to arachidonic acid metabolism. Proc. Am. Can. Res. 33:305, 1992.
- 90. Ahn M, Harris JE, Wilbanks GW, and <u>Braun DP</u>: Induction of tumoricidal function in macrophages by anti-CD3 monoclonal antibodies. Proc. Am. Assoc. Can. Res. 33:305, 1992.

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Donald P. Braun, Ph.D.

- 91. Ahn M, Plate JMD, Harris JE, and <u>Braun DP</u>: Downregulation of Interleukin 6 in alveolar macrophages of lung cancer patients facilitates the development of tumoricidal function. Blood 80:103a, 1992.
- 92. Braun DP, Ahn M, Harris JE, Wilbanks G, and Plate J: Altered synthesis of cytokine messenger RNA (m RNA) in peripheral blood monocytes and peritoneal macrophages from patients with gynecological malignancies. Proc. Am. Soc. Clin. Oncol. 12:299, 1993.
- 93. Ahn M, Plate J, Harris JE, and <u>Braun DP</u>: Allogeneic lymphocytes stimulate macrophage tumoricidal function in association with IL-6 suppression. Proc. Am. Assoc. Cancer Res. 34:445, 1993.
- 94. Harris JE, Ahn M, and <u>Braun DP</u>: Interleukin-12 (IL-12) is superior to gamma interferon (IFNγ) plus endotoxin and to Monocyte Colony Stimulating Factor (M-CSF) in stimulating tumoricidal function in alveolar macrophages (AM) from patients with non-small cell lung cancer. Blood, 82:509a, 1993.
- 95. Taylor SG IV, <u>Braun DP</u>, Coon JS, Hutchinson JC, Panje WR, Caldarelli DD, Shott S and Preisler HD. Augmentation of autologous tumoricidal function in peripheral blood monocytes from head and neck cancer patients by treatment with indomethacin. Proceedings American Association for Cancer Research 35: 480, 1994.
- 96. Braun DP, Coon JS, Taylor SG IV, Hutchinson JC, Panje WR, Caldarelli DD, Shott S and Preisler HD. Discordance of leukocyte-mediated tumoricidal function in the blood and leukocyte infiltration in tumor tissues. Proceedings American Association for Cancer Research 35: 494, 1994.
- 97. Effect of endometriosis on the production of cytokines by peripheral blood monocytes.

  D.P. Braun, N. Rana, C. Rotman, H.M. Gebel and W.P. Dmowski. Proc. Amer.

  Fertil. Soc. 50: s20, 1994.
- 98. Effect of danazol (DZ) or gonadotoprin releasing hormone agonist (GnRH-A) therapy on the production of cytokines by peripheral blood monocytes (PBM) from patients with endometrosis (ENDO). D.P. Braun, N. Rana, C. Rotman, H.M. Gebel and W.P. Dmowski. Proc. Amer. Fertil. Soc. 50: 149, 1994.
- 99. Braun DP, Tereshkova N, Ortegel J and Preisler HD. Cytotoxic function of peripheral blood blast cells from patients with acute myelogenous leukemia. Proceedings American Association for Cancer Research 36: 473, 1995.

- 100. Braun, DP, Taylor, SGT IV, Coon, J, Griem, K. LaFollette, S. Hutchinson, J, Kotelnikov, V, and Preisler, HP. Biological and Immunological Differences in Primary and Recurrent Head and Neck Cancer. Proc. Amer.Soc.of Clin. Oncol. 14:22,1995.
- 101. Taylor SGT IV, Braun DP, Kotelnikov VM, Wood NB, Mundle S, Coon J, Raza A, LaFollette S, Griem K, Hutchinson J, Cladarelli D, Panje W, Friedman M, Preisler H. Tumor proliferative and immunologic alterations during combined chemotherapy/radiation in Head and Neck Cancer. Proc. ASCO. 15:, 315, 1996.
- 102. Braun DP, House R, Gebel HG, Rana N, and Dmowski WP. Differential Sensitivity of endometrial cells from uterus and peritoneal implants to macrophage-mediated lysis in patients with endometriosis. Proceedings of the Vth World Congress on Endometriosis. Yokohama, Japan. October, 1996.
- 103. Braun DP, House R, Gebel HG, Rana N, and Dmowski WP. Macrophage functional changes in women with unexplained infertility identifies a subset of patients with subclinical endometriosis. Proceedings of the Vth World Congress on Endometriosis. Yokohama, Japan. October, 1996.
- 104. DmowskiWP, Rana N, Braun DP, Gebel HG, and House R. Is there a pathophysiological basis for generalized symptoms in women with endometriosis? Proceedings of the Vth World Congress on Endometriosis. Yokohama, Japan. October, 1996.
- 105. Braun DP, Gebel HG, Rana N, and Dmowski WP. Cytolysis of endometrial cells (EC) by autologous peripheral blood monocytes (PBM) and peritoneal macrophages (PM) in women with endometriosis (Endo). Proceedings of the 52nd Annual Meeting, American Society of Reproductive Medicine, 1996.
- 106. Braun DP, Harris JE, Gebel H, Plate J, Deziel D, Millikan K, Doolas A and Prinz R. Immunologic Evaluation of pancreatic cancer patients. Proc. Amer. Assoc. Cancer Res. 38:487, 1997.
- 107. Ortegel J, Staren E, Faber P, Warren W, and Braun D. Cytokine biosynthesis by tumor infiltrating T cells in non-small cell lung cancers. Proc. Amer. Assoc. Cancer Res. 38:630, 1997.
- 108. Braun, DP, Dmowski, WP. Stimulation of eutopic and ectopic endoetrail cell proliferation by autologous peritoneal fluids with endometriosis is due to tumor necrosis factor-alpha (TNFα). Oral Presentation, ASRM/CFAS '99 Conjoint Annual Meeting, Ontaior, Canada, September 25-30,1999.

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- 109. Ding, J, Shen, J, Braun, DP, Rana, N, Fernandez, BB, Dmowski, WP. Apoptosis in Endometrial Glandular and Stromal Cells in Women with and without Endometriosis. Oral Presentation, ASRM/CFAS '99 Conjoint Annual Meeting, Ontario, Canada, September 25-30, 1999.
- 110. Shen, J., Ding, J. Braun, DP, Rana, N, Dowbrowski, A, Dmowski, WP. Endometrial Macrophages May Be Involved in the Regulation of Endometrial Apoptosis. Poster Presentation, ASRM/CFAS '99 Conjoint Annual meeting, Ontario, Canada, September 25-30, 1999.
- 111. Ding, J, Shen, M, Gogacz, M, Braun, DP, Rana, N., Dmowski, WP. Endometrial Apoptosis Is Inhibited In Vitro by TNFα in Women with Endometriosis and Is Stimulated by TNFα in Healthy Women. Journal of the Society for Gynecologic Investigation, 2000.
- 112. <u>Braun, DP</u>, Ding, J, Shen, M, Gogacz, M., Dmowski, WP. Modulation of Endometrial Cell Apoptosis and Proliferation by Tumor Necrosis Factor in Women with Endometriosis. Journal of the Society for Gynecologic Investigation, 2000.
- 113. Ding, J, Gogacz, Shen, M, <u>Braun, DP</u>, Rana, N, Dmowski. Expression of TNFα Receptor Type-I Gene in Endometrial Cells from Women with and without Endometriosis. Submitted to American Society For Reproductive Medicine, 56<sup>th</sup> Annual Meeting, October 21-25, 2000, San Diego, California.

## UNIVERSITY INSTRUCTION:

## Course Director

Principles of Immunology. University of Illinois, Dept. of Microbiology, 1977.

Biology of Cancer. College of Nursing, Rush Presbyterian St. Luke's Medical Center, 1982.

Tumor Immunology. Department of Immunology, College of Medicine, Rush Presbyterian St. Luke's Medical Center, 1985.

The Basic Science of Oncology. Rush Cancer Institute. 1993-1995.

## Lecturer

Basic and Clinical Immunology, Department of Immunology/Microbiology Cellular Immunology, Department of Immunology/Microbiology

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Tumor Immunology, Department of Nursing Pathophysiology of Malignant Disease, Department of Pathology Medical Oncology Didactic Course

## **Organizing**

Medical Oncology Didactic Lecture Series Medical Oncology Research Seminar Series Oncology Fellow Basic Sciences Journal Club

## **Advisory**

Graduate Students Matriculated (5)
Dissertation Advisory Committees (18)

As Chairman (2)

As Advisor (5)

As Member (11)

Other Department (2)

Other University (5; 4, University of Illinois, 1 Notre Dame)

## **UNIVERSITY COMMITTEES:**

Student Judiciary Review

Academic Freedom, Chairman, 1994-1996

CED Review of Rush Medical College

Radiation Oncology Search Committee

General Surgery Search Committee

Department of Dermatology Search Committee

Department of OB/Gyn Search Committee

Faculty Council, 1996-1999.

Task Force on Interaction with Biomedical Industry, Chairman.

Academic Council

## **INVITED PRESENTATIONS:**

- 1. Transfer of Plasmacytoma Immunity with Immune RNA Extracts from Tumor-bearing Balb/C mice. American Dental Association, Chicago, IL, 1977.
- 2. Principles of Cancer Immunology. University of Indiana School of Medicine. Gary, Indiana, 1978.

- 3. Synergy between Cytotoxic Chemotherapy and Anti-Tumor Immunity in Solid Tumor Cancer Patients. Department of Pathology, University of Illinois Medical Center, Chicago, IL, 1979.
- 4. Selective Effects of Cytotoxic Chemotherapy on Suppressor Cells in Cancer Patients. Illinois Cancer Council, Chicago, IL, 1980.
- 5. Immunoregulatory Cell Function and Impaired Immunity in Patients with Gliomas. Department of Neurosurgery, Cook County Hospital, 1983.
- 6. Effect of Interferon Therapy on Prostaglandin-producing Suppressor Cells in Renal Cell Cancer Patients. Burroughs Wellcome, Research Triangle Park, North Carolina, 1984.
- Changes in Prostaglandin Metabolism in Monocytes from Interferon-treated Cancer Patients. Department of Microbiology, University of South Florida, Tampa, Florida, 1985.
- 8. Potentiation of Immunity in Chemotherapy-Treated Cancer Patients. Northwestern School of Medicine, Cancer Center, Chicago, IL, 1985.
- Prostaglandin-Producing Suppressor Cells in Cancer Patients and AIDS Patients.
   Department of Pathology, Loyola University School of Medicine, Chicago, IL. 1986.
- Synergy between Chemotherapy and Immunity in Solid Tumor Cancer Patients.
   Roswell Park Memorial Institute, Grace Cancer Center, Buffalo, New York, 1986.
- 11. Modification of the Effects of Cancer Chemotherapy on Immune Responses in Lung Cancer Patients by Treatment with Piroxicam. Pfiser Pharmaceuticals, New Orleans, Louisiana, 1986.
- 12. Enhancement of Deficient Cellular Immunity in Head and Neck Cancer Patients Treated with Piroxicam. Pfizer Laboratories, Annaheim, California, 1987.
- 13. Modulation of Immunity in Cancer Patients by Prostaglandin Antagonists. Second International Conference on Immunity to Cancer. Williamsburg, Virginia, 1987.
- 14. Potential for Combining Cytotoxic Chemotherapy and Biological Response Modifiers in Cancer Patients. Illinois Cancer Council, Chicago, IL, 1988.
- 15. Monocyte Immunoregulatory Cell Function in HIV-Infected Patients. American Red Cross, Chicago, IL, 1988.

- Lymphokine Activated Killer Cell Function in Tumor Infiltrating Leukocytes from Colon Cancer Patients. Illinois Cancer Council Symposium on Biological Response Modifiers, Chicago, IL, 1988.
- 17. Principles of Cancer Immunology. Department of Surgery, Grant Hospital Chicago, IL, 1990.
- 18. Immune Function in Cancer Patients and the Effects of Chemotherapy. Lederle Laboratories Symposium. Chicago, IL, 1990.
- 19. Danazol Effects on Peritoneal Macrophage Function in Patients with Endometriosis. Sterling International. New York, NY, 1991.
- 20. Peritoneal Macrophage Function in Endometriosis. Chicago Association of Reproductive Endocrinology. Chicago, IL, 1991.
- 21. The Biology and Immunology of Cancer. American College of Surgeons, Chicago, IL, 1991.
- Immunotherapy of Cancer Patients, Baxter/Bartels Oncology Focus Meeting. Chicago, IL, 1992.
- 23. Systemic and Local Tumor Immunity in Patients with Solid Tumors. Abbott Laboratories, Abbott Park, IL, 1992.
- 24. Modulation of Endometrial Cell Proliferation by Monocytes in Patients with Endometriosis. Chicago Association of Reproductive Endocrincology. Chicago, IL, 1992.
- 25. Modulation of Tumoricidal Function in Tumor-Associated Macrophages from Solid Tumor Patients. Section of Hematology/Oncology, University of Chicago Chicago, IL, 1992.
- Stimulation of Endometrial Cell Proliferation by Monocytes in Endometriosis Patients.
   Adeza Biomedical Corp. Sunnyvale, CA. 1993.
- Cytokine Synthesis by Circulating Monocytes in Patients with Endometriosis. Chicago Association of Reproductive Endocrinology. Chicago, IL, 1994.
- 28. Effects of Virulizin on Macrophage Functions of Cancer Patients. Hoffman LaRoche, Nutley, NJ, 1994.

- 29. Macrophage Functional Changes in Unexplained Infertility. Chicago Association of Reproductive Endocrinology. Chicago, IL, 1995.
- 30. Differential Sensitivity of Ectopic and Eutopic Endometrial Cells to Macrophage-Mediated Cytolysis in Women with Endometriosis. Chicago Association of Reproductive Endocrinology. Chicago, IL, 1996.
- 31. Effects of Virulizin on Macrophage Functions of Cancer Patients and Women with Endometriosis. Schering Plough, NJ, 1996.
- 32. Chemotherapy-induced immune modulation in cancer patients. National Cancer Institute of Japan-Tokyo Japan, January, 1997.
- 33. Macrophage functions in cancer and endometriosis and its modulation by virulizin. Pharmacia. Milano, Italy, February, 1997.
- 34. Strategies for immune stimulation in cancer patients. Connaught Laboratories, Toronto, Canada, October, 1997.